

#2
OIPE

RAW SEQUENCE LISTING

DATE: 04/23/2001

PATENT APPLICATION: US/09/832,320

TIME: 13:21:16

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04232001\I832320.raw

ENTERED

```

4 <110> APPLICANT: Crane, Edmund H.
5   Crane, Virginia C.
7 <120> TITLE OF INVENTION: Maize Pathogenesis-Related
8   Polynucleotide and Methods of Use
10 <130> FILE REFERENCE: 35718/214291
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/832,320
C--> 12 <141> CURRENT FILING DATE: 2001-04-10
12 <150> PRIOR APPLICATION NUMBER: US 60/195,801
13 <151> PRIOR FILING DATE: 2000-04-10
15 <160> NUMBER OF SEQ ID NOS: 3
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 898
21 <212> TYPE: DNA
22 <213> ORGANISM: Zea mays
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (63)...(674)
28 <400> SEQUENCE: 1
29 ctgcacgca ctgcacgctc attcactgag ccatttactc agatcaccaa ctccagatct 60
30 ca\atg gcg cac tcg cgc agc cac cac ctc ctc ctg ctc ccc gcg 107
31 Met Ala His Ser Arg Ser His His His Leu Leu Leu Leu Pro Ala
32   1           5           10          15
34 ccc atg gcc acg gcg tgc ttg ctc ctc gcc acc ctc ctc gcg ctc tgc 155
35 Pro Met Ala Thr Ala Cys Leu Leu Leu Ala Thr Leu Leu Ala Leu Cys
36   20          25          30
38 gcc gcg ccg gcg ccg acc cac ggc gcg cgc gtc ctc atg ccg ggc ggc 203
39 Ala Ala Pro Ala Pro Thr His Gly Ala Arg Val Leu Met Pro Gly Gly
40   35          40          45
42 gcg ggc gcg gtg acc aag gcg cag cag ggt ggc acc ggc agc ggc agc 251
43 Ala Gly Ala Val Thr Lys Ala Gln Gln Gly Gly Thr Gly Ser Gly Ser
44   50          55          60
46 aac gcg acg gcg gac gag tac ctg gcg ccg cac aac cag gcg cgc gcg 299
47 Asn Ala Thr Ala Asp Glu Tyr Leu Ala Pro His Asn Gln Ala Arg Ala
48   65          70          75
50 gcg gtg ggc gtg gcc ccg ctg cgg tgg aac gcg ggc ctg gct tcg gcg 347
51 Ala Val Gly Val Ala Pro Leu Arg Trp Asn Ala Gly Leu Ala Ser Ala
52   80          85          90          95
54 gcc gcg ggg acg gtg gcg cag cag cgg cgg cag ggc ggg tgc gcg ttc 395
55 Ala Ala Gly Thr Val Ala Gln Gln Arg Arg Gln Gly Gly Cys Ala Phe
56   100         105         110
58 gcg gac gtg ggg gcc agc ccc tac ggc gcg aac cag ggg tgg gcg agc 443
59 Ala Asp Val Gly Ala Ser Pro Tyr Gly Ala Asn Gln Gly Trp Ala Ser
60   115        120        125
62 tac cgc gcg cgc ccc gcc gag gtg gtg gcg ctg tgg gtg gcg gag ggc 491
63 Tyr Arg Ala Arg Pro Ala Glu Val Val Ala Leu Trp Val Ala Glu Gly
64   130        135        140

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```

66 cgg tac tac acc cac gcc aac aac acg tgc gcc gcg ggg cgg cag tgc      539
67 Arg Tyr Tyr Thr His Ala Asn Asn Thr Cys Ala Ala Gly Arg Gln Cys
68      145                      150                      155
70 ggc acg tac acg cag gtg gtg tgg cgc aac acc gcc gag gtc ggg tgc      587
71 Gly Thr Tyr Thr Gln Val Val Trp Arg Asn Thr Ala Glu Val Gly Cys
72 160                      165                      170                      175
74 gcg cag gcc agc tgc gcc acg ggc gcc acg ctc acg ctc tgc ctg tac      635
75 Ala Gln Ala Ser Cys Ala Thr Gly Ala Thr Leu Thr Leu Cys Leu Tyr
76      180                      185                      190
78 aac ccg cac ggc aac gtg cag ggc cag agc ccc tac tag ctagctgagg      684
79 Asn Pro His Gly Asn Val Gln Gly Gln Ser Pro Tyr *
80      195                      200
82 tcatcaggtc gtagcgacgg agcccaactg ccgccgccgg cggcagcgga gtacgtagggt      744
83 tcatcagtc tctctagttc ggtcacggaa aggctgtttt gtggtgtgat ccggtgggtgt      804
84 tcttggtgtt gttgacaact gctttggttt ggtgtatcag cttttgttgc cgggtaaaaa      864
85 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa      898
87 <210> SEQ ID NO: 2
88 <211> LENGTH: 203
89 <212> TYPE: PRT
90 <213> ORGANISM: Zea mays
92 <400> SEQUENCE: 2
93 Met Ala His Ser Arg Ser His His His Leu Leu Leu Leu Pro Ala Pro
94 1      5      10      15
95 Met Ala Thr Ala Cys Leu Leu Leu Ala Thr Leu Leu Ala Leu Cys Ala
96      20      25      30
97 Ala Pro Ala Pro Thr His Gly Ala Arg Val Leu Met Pro Gly Gly Ala
98      35      40      45
99 Gly Ala Val Thr Lys Ala Gln Gln Gly Gly Thr Gly Ser Gly Ser Asn
100      50      55      60
101 Ala Thr Ala Asp Glu Tyr Leu Ala Pro His Asn Gln Ala Arg Ala Ala
102 65      70      75      80
103 Val Gly Val Ala Pro Leu Arg Trp Asn Ala Gly Leu Ala Ser Ala Ala
104      85      90      95
105 Ala Gly Thr Val Ala Gln Gln Arg Arg Gln Gly Gly Cys Ala Phe Ala
106      100      105      110
107 Asp Val Gly Ala Ser Pro Tyr Gly Ala Asn Gln Gly Trp Ala Ser Tyr
108      115      120      125
109 Arg Ala Arg Pro Ala Glu Val Val Ala Leu Trp Val Ala Glu Gly Arg
110      130      135      140
111 Tyr Tyr Thr His Ala Asn Asn Thr Cys Ala Ala Gly Arg Gln Cys Gly
112 145      150      155      160
113 Thr Tyr Thr Gln Val Val Trp Arg Asn Thr Ala Glu Val Gly Cys Ala
114      165      170      175
115 Gln Ala Ser Cys Ala Thr Gly Ala Thr Leu Thr Leu Cys Leu Tyr Asn
116      180      185      190
117 Pro His Gly Asn Val Gln Gly Gln Ser Pro Tyr
118      195      200
120 <210> SEQ ID NO: 3
121 <211> LENGTH: 612

```

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```

122 <212> TYPE: DNA
123 <213> ORGANISM: Zea mays
125 <220> FEATURE:
126 <221> NAME/KEY: CDS
127 <222> LOCATION: (1)...(612)
129 <400> SEQUENCE: 3
130 atg gcg cac tcg cgc agc cac cac cac ctc ctc ctg ctc ccc gcg ccc      48
131 Met Ala His Ser Arg Ser His His His Leu Leu Leu Leu Pro Ala Pro
132 1 5 10 15
134 atg gcc acg gcg tgc ttg ctc ctc gcc acc ctc ctc gcg ctc tgc gcc      96
135 Met Ala Thr Ala Cys Leu Leu Leu Ala Thr Leu Leu Ala Leu Cys Ala
136 20 25 30
138 gcg ccg gcg ccg acc cac gcc gcg cgc gtc ctc atg ccg gcc gcc gcg      144
139 Ala Pro Ala Pro Thr His Gly Ala Arg Val Leu Met Pro Gly Gly Ala
140 35 40 45
142 gcc gcg gtg acc aag gcg cag cag ggt gcc acc gcc agc gcc agc aac      192
143 Gly Ala Val Thr Lys Ala Gln Gln Gly Gly Thr Gly Ser Gly Ser Asn
144 50 55 60
146 gcg acg gcg gac gag tac ctg gcg ccg cac aac cag gcg cgc gcg gcg      240
147 Ala Thr Ala Asp Glu Tyr Leu Ala Pro His Asn Gln Ala Arg Ala Ala
148 65 70 75 80
150 gtg gcc gtg gcc ccg ctg cgg tgg aac gcg gcc ctg gct tcg gcg gcc      288
151 Val Gly Val Ala Pro Leu Arg Trp Asn Ala Gly Leu Ala Ser Ala Ala
152 85 90 95
154 gcg ggg acg gtg gcg cag cag cgg cgg cag gcc ggg tgc gcg ttc gcg      336
155 Ala Gly Thr Val Ala Gln Gln Arg Arg Gln Gly Gly Cys Ala Phe Ala
156 100 105 110
158 gac gtg ggg gcc agc ccc tac gcc gcg aac cag ggg tgg gcg agc tac      384
159 Asp Val Gly Ala Ser Pro Tyr Gly Ala Asn Gln Gly Trp Ala Ser Tyr
160 115 120 125
162 cgc gcg cgc ccc gcc gag gtg gtg gcg ctg tgg gtg gcg gag ggg cgg      432
163 Arg Ala Arg Pro Ala Glu Val Val Ala Leu Trp Val Ala Glu Gly Arg
164 130 135 140
166 tac tac acc cac gcc aac aac acg tgc gcc gcg ggg cgg cag tgc gcc      480
167 Tyr Tyr Thr His Ala Asn Asn Thr Cys Ala Ala Gly Arg Gln Cys Gly
168 145 150 155 160
170 acg tac acg cag gtg gtg tgg cgc aac acc gcc gag gtc ggg tgc gcg      528
171 Thr Tyr Thr Gln Val Val Trp Arg Asn Thr Ala Glu Val Gly Cys Ala
172 165 170 175
174 cag gcc agc tgc gcc acg gcc gcc acg ctc acg ctc tgc ctg tac aac      576
175 Gln Ala Ser Cys Ala Thr Gly Ala Thr Leu Thr Leu Cys Leu Tyr Asn
176 180 185 190
178 ccg cac gcc aac gtg cag gcc cag agc ccc tac tag      612
179 Pro His Gly Asn Val Gln Gly Gln Ser Pro Tyr *
180 195 200

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/832,320

DATE: 04/23/2001

TIME: 13:21:17

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04232001\I832320.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date